Amendments to the Claims



- 1. (Currently Amended) A method of automatically invalidating data

 cached in a cache system physically separate from a data server configured to originate
 data to be cached in the cache system, the method comprising:
- 4 <u>at the cache system</u>, caching a first data item received from the a data server for service in response to requests to view said first data item;
- receiving at the cache system a change request to alter a data item; and automatically invalidating said first data item at the cache system in response to said change request.
- (Original) The method of claim 1, further comprising:
 comparing said change request to a set of rules for determining when to automatically invalidate a data item.
- 3. (Original) The method of claim 2, wherein said data item to be alteredcomprises said first data item.
- 4. (Original) The method of claim 1, wherein said automatically
 invalidating comprises identifying a relationship between said data item to be altered and said first data item.
- 5. (Original) The method of claim 1, wherein said cache system
 comprises multiple caches and said receiving occurs at a first of the multiple caches, the method further comprising:
- sending a notification of said automatic invalidation from the first cache of the multiple caches to a second cache of the multiple caches.
- 6. (Currently Amended) A method of operating a cache system to
 2 facilitate automatic invalidation of cached data, the method being performed at the cache
 system and comprising:

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caching a first set of data received from a data server;
 receiving at the cache system a first request to change a second set of data;
 retrieving from said first request an identifier of said second set of data; and automatically invalidating said first set of data in the cache system without
 awaiting an invalidation communication from the data server.

- 7. (Original) The method of claim 6, wherein said second set of data comprises said first set of data.
- 8. (Original) The method of claim 6, wherein said second set of data is a later version of said first set of data.
- 9. (Original) The method of claim 6, further comprising identifying a relationship between said second set of data and said first set of data.
- 10. (Original) The method of claim 9, wherein said identifying a relationship comprises:
- comparing a pattern of said first request to a first rule for determining when to

 4 automatically invalidate a set of data.
- 11. (Currently Amended) The method of claim 10, wherein said first
 2 rule comprises a first pattern for identifying a request in response to which a set of data may be automatically invalidated, and further comprises a second pattern, different from
 4 said first pattern, to identify said set of data to be automatically invalidated.
- 12. (Original) The method of claim 6, wherein the cache system 2 comprises multiple caches and:

wherein said caching comprises caching said first set of data at a first cache of the multiple caches; and

wherein said automatically invalidating is performed at a second cache of the multiple caches;



- the method further comprising notifying the first cache, by the second cache, of said automatic invalidation.
- 13. (Original) A method of automatically invalidating cached data, 2 comprising:
- caching a first set of data at a caching system for serving in response to a view request, wherein said view request comprises a request to view said first set of data, and wherein said first set of data is received from a data server;
- receiving at the caching system a change request, wherein said change request comprises a request to change said first set of data;
- identifying said first set of data from said change request; and
 automatically invalidating said cached first set of data without waiting for the data
 server to implement said change request.
- 14. (Currently Amended) The method of claim 13, wherein said data

 2 server is not notified of said change request only until after said automatic invalidation of said cached first set of data.
- 15. (Currently Amended) The method of claim 13, wherein said first set of data comprises a <u>first user's bid on price of</u> an item being auctioned in an electronic auction, and wherein said change request comprises a <u>second user's new</u> bid on said item.

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- 16. (Original) The method of claim 13, wherein said first set of data
 2 comprises information concerning one or more products at a publicly accessible network location, and wherein said change request comprises a change to said list of products.
- 17. (Original) The method of claim 13, wherein said receiving a change request comprises receiving a sequence of communications matching a predetermined pattern.
 - 18. (Currently Amended) A computer readable storage medium



- storing instructions that, when executed by a computing device, cause the computing device to perform a method of operating a cache system to facilitate automatic
- 4 invalidation of cached data, the method <u>being performed at the cache system and</u> comprising:
- caching a first set of data received from a data server;
 receiving at the cache system a first request to change a second set of data;
 retrieving from said first request an identifier of said second set of data; and
- automatically invalidating said first set of data in the cache system without

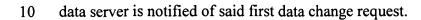
 awaiting an invalidation communication from the data server.
- 19. (Original) A computer readable storage medium storing instructions 2 that, when executed by a computing device, cause the computing device to perform a

method of automatically invalidating cached data, the method comprising:

- caching a first set of data at a caching system for serving in response to a view request, wherein said view request comprises a request to view said first set of data, and wherein said first set of data is received from a data server;
- receiving at the caching system a change request, wherein said change request comprises a request to change said first set of data;
- identifying said first set of data from said change request; and
 automatically invalidating said cached first set of data without waiting for the data
 server to implement said change request.
- 20. (Currently Amended) A cache system configured to automatically invalidate cached data, comprising:
- a first cache configured to cache data received from a data server, wherein the

 data server is coupled to the cache system via a network link;
- a data service module configured to serve a first set of cached data in response to

 a first data view request from a client; and
- an invalidation module configured to automatically invalidate said first set of cached data when a first data change request is received from a client;
 - wherein said automatic invalidation is performed at the cache system before the





- 21. (Original) The cache system of claim 20, wherein said first cache 2 comprises said invalidation module.
- 22. The cache system of claim 20, further comprising a set of (Original) 2 rules for determining when said first set of cached data is to be automatically invalidated in response to a data change request.
- 23. (Original) The cache system of claim 22, further comprising a user 2 interface configured to facilitate the creation of one of said rules.
- 24. (Original) The cache system of claim 20, wherein said first data 2 change request comprises a predetermined sequence of communications.
- 25. (Original) The cache system of claim 20, further comprising: 2 a second cache; wherein said second cache is notified by said first cache of said automatic invalidation.
 - 26. (Withdrawn)

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27. (Withdrawn)